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10/620,911	07/15/2003	Donald McCoy	D-1171 R	8962
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RALPH E. JOCKE			EXAMINER	
Walker & Jocke			TRAN, HAI	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/620,911

**Applicant(s)**

MCCOY ET AL.

**Examiner**

HAI TRAN

**Art Unit**

3694

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This Final Office Action is in response to Applicant's Amendment/Remarks filed on October 5, 2009 for application, titled: "Automated Banking Machine Bootable Media Authentication".
2. Claims 1-34 remain pending in this application and have been examined.

***Priority***

3. This application claims the benefit of U.S. Provisional Patent Application No. 60/396,607, filed 07/16/2002.

***Claim Objections***

4. Claims 5 and 6 are objected to because claim 6 is a duplicated claim of claim 5. Appropriate correction is required.

***Response to Arguments***

5. Applicant's arguments filed 10/5/2009 have been fully considered but they are not persuasive.

**Claims 1, 14, 16-17, 19-20, and 22** (Remarks, pages 18-22)

6. Applicant argues that the Cromer reference does not teach:

A) manual input by a user of a BIOS boot password prior to booting from the device (see Remarks, page 18, third paragraph).

7. The Examiner disagrees. Cromer teaches a data processing system and method of password protecting the boot of a data processing system. Cromer teachings allow a user to select which boot device to be in the boot sequence and which boot device to be required to enter the BIOS configuration password. If no request to enter the BIOS configuration routine is received, the process passes to next boot device (see paragraph 22, Figure 2A/block 120-122). If a BIOS configuration request is received, *the BIOS software prompts the user to enter a configuration password* (see paragraph 22; Figures 2A/blocks 106, 108; 2B/blocks 110-116). The Examiner notes this as that a user can enter the type of password he/she wants, or user can enter the unique device password which is a combination of device model and serial numbers as taught by Cromer. However, if the user chooses his/her type of own password, the computer system will prompt the user to manually enter the BIOS password prior to booting the device. Cromer teaches the unique device password (combination of the model and serial numbers of the boot device) is a "preferred embodiment" because it offers a reasonable level of security (see paragraph 24, lines 1-3, 19-20).

B) BIOS password in Cromer is a combination of the boot device's model and serial and numbers (see Remark, page 19, first paragraph, page 21, third paragraph).

8. Applicant argues that Cromer's password is a combination of the serial and model numbers and the computer interrogates the device for it, and therefore, it is not a user inputted password.

9. The Examiner disagrees. Cromer teaches the unique device password as a "preferred embodiment" because it offers a reasonable level of security (see paragraph

24). The user can choose his or her type of password as taught in paragraph 22, and if a user uses his or her own type of password, he/she has to manually input the password during booting the device. In conclusion, Examiner is satisfied that Cromer in view of an ATM discloses the limitations as claimed.

C) Cromer's invention prevents any unknown portable drive from being used to boot a computer (see remarks, pages 21-22).

10. Applicant argues that Cromer teaches preventing any unknown drive from being used to boot a computer.

11. The Examiner disagrees. Cromer makes its computer to be boot from devices that has been coupled to the BIOS of the computer simply to make its computer more secure, and in this way so the computer can store the boot device's model and serial numbers (its unique device password). However, as explained in above, a user can always enter his or her own type of password and in this way any device with the correct password can boot the computer.

12. In conclusion, Cromer teaches a secure data processing computer and method for password protecting a boot device from a standalone computer purpose. Cromer does not teach or discuss an ATM. The features that Applicant argues are well known and standard from the perspective of an ATM. It would have been obvious to one of ordinary skill in the art at the time of the invention to purchase Cromer's computer system and customize it to fit into an ATM. The motivation is simply to provide a more secure ATM system during a startup and since Cromer's teachings is direct toward to protecting a computer system; no unpredicted results would be expected.

**Claims 2, 4, 23, and 34** (Remarks, pages 23-24)

13. Applicant argues that Cromer does not teach the following features:

D) if the BIOS boot password is not inputted within a predetermined amount of time, the computer is booted responsive to the boot record of the bootable media of the default storage device drive,

14. The Examiner disagrees. With respect to "a predetermined amount of time", the Examiner notes this is a well known and standard feature for an ATM (every ATM will abort your action if a user does not enter the password within a predetermined amount of time). With respect to "the computer is booted responsive to the boot record of the bootable media of the default storage device drive", Cromer teaches that if a device does not supply correct password, it will select next boot device according to priority (see paragraph 27, Figure 2A/blocks 130, 122). It would have been obvious to one of ordinary skill in the art at the time of the invention include the password protecting boot device feature as taught by Cromer with any ATM to offer an ATM system that will abort your action if a password is not entered within a predetermined amount of time.

E) a cash dispenser or dispensing cash from a cash dispenser.

15. The Examiner disagrees. Again, Examiner notes this is a well known and standard feature for an ATM. Therefore, one of ordinary skill in the art would have combined the password protecting boot device feature as taught by Cromer with an ATM to offer an ATM that will dispense money.

16. In conclusion, the Examiner notes that the features that Applicant argues are well known and standard for an ATM and that the rejection is based on Cromer in view of an ATM (see last Office Action). Therefore, the Examiner is satisfied that Cromer in view of an ATM discloses the limitations as claimed.

**Claims 5 and 32** (Remarks, page 25)

17. Applicant argues that Cromer does not teach the following feature:

F) the same configuration password is inputted by the user to boot from a detected boot media of an alternative storage device drive.

18. The Examiner disagrees. Cromer teaches selecting next boot device according to priority in block 122, then, block 126 checks that if a password is required for the device. Examiner is aware that if a user chooses the unique configuration password, the next selected device will have different password since each device has its own combination of model and serial numbers. However, as explained in above, a user can choose his or her own password and if a user uses the same password or generic password for all devices (for convenience purpose), then the same configuration is inputted to boot the detected next boot device.

19. In conclusion, Examiner is satisfied that Cromer in view of an ATM discloses the limitations as claimed.

**Note:** Applicant has filed a 1.132 letter to explain the differences between the reference and the claimed invention. However, Applicant has not explained to Examiner if the he invents the claimed invention from scratch; or purchases the computer system from another manufacturer and customizes it to fit into an ATM. If

Applicant purchases the computer system, Examiner would like to know the differences he has modified so that the Examiner can determine the allowability of this application easily.

Note: Examiner has added few words in the Office Action for clarification purpose, no change of reference.

***Claim Rejections - 35 USC § 103***

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims 1-34 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Cromer et al. (U.S. Patent Application No. 2002/0166072) ("Cromer").

22. **Regarding to claim 1**, Cromer teaches a method comprising:

a) detecting with a computer of an automated banking machine for the presence of a bootable media in at least one alternative storage device drive of the automated banking machine (see Cromer, par. 6 "The Bios software includes a configuration routine that permits a user to select an order in which potential boot devices are checked by the BIOS at startup"; par. 22 "If a BIOS configuration request is received, the BIOS software prompts the user to enter a configuration password". Figure 2A/block 106, 108, 2B/blocks 110-116), wherein a BIOS of the computer specifies which of a plurality of storage device drives corresponds to a default storage device drive

which does not require an input of a first BIOS password, and which of the plurality of storage device drives corresponds to the at least one alternative storage device drive which does require the input of the BIOS boot password (see Cromer, par. 22 "If no request to enter ... However, if a BIOS configuration request is received ..."; par. 26 "block 126 which depicts the BIOS software determining whether or not a correct entry of password is required to boot from the selected boot device");

b) booting the computer responsive to a boot record on either the bootable media of the at least one alternative storage device drive or a bootable media of the default storage device drive (see Cromer, par. 26; Figure 2A);

wherein when the bootable media of the at least one alternative storage device drive is detected in step (a), the booting of the computer includes requiring at least once for a user to input a password, wherein when the inputted password corresponds to the BIOS boot password stored in the BIOS of the computer, the computer is booted responsive to the boot record on the bootable media of the at least one alternative storage device drive (see Cromer, Figure 2A and description); and

wherein when the bootable media of the at least one alternative storage device drive is not detected in step (a), the computer is booted responsive to a boot record on the bootable media of the default storage device drive without requiring a user to input the BIOS boot password (see Cromer, Figure 2A and description).

23. Cromer teaches a data processing system and method of password protecting the boot of a data processing system (see par. 120 including a unique device password as a preferred embodiment (see par. 24). Cromer teaches a user can enter his own type of password (see par. 22), but does not disclose an ATM.

24. The Examiner notices that the claimed invention is basically the Cromer's invention and combined with an ATM. It would have been obvious to one of ordinary skill in the art at the time of the invention to include Cromer's invention with the user specified password into an ATM to offer an improved ATM that can be booted with a manual inputted password of a booting device during a startup. The motivation is simply to provide a more secure ATM system during a startup and since Cromer is also directed toward protecting a data processing system, no unpredicted results would be expected (see Cromer, par. 7).

25. **Regarding to claim 2**, Cromer teaches that the method according to claim 1, wherein when the bootable media of the at least one alternative storage device drive is detected in step (a) and the BIOS boot password is not inputted within a predetermined amount of time, in step (b) the computer is booted responsive to the boot record of the bootable media of the default storage device drive.

26. With respect to "a predetermined amount of time", Examiner notes that this is a well known and standard feature for any ATM. An ATM will abort your action and notifies the system administrator if the password is not inputted within a predetermined amount of time, or if the password is not inputted correctly for a number of times.

27. Cromer teaches that if a device does not supply correct password, it will select next boot device according to priority (see paragraph 27, Figure 2A/blocks 130, 122 and description for 2A/B).

28. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the password protecting boot device feature as taught by Cromer with an ATM to offer an improved ATM system that will select the next boot device if a password is not entered within a predetermined amount of time during a startup.

29. **Regarding to claim 3**, Cromer teaches that the method according to claim 1, wherein when the bootable media of the at least one alternative storage device drive is detected in step (a) and at least once the inputted password does not correspond to the BIOS boot password stored in the BIOS of the computer, in step (b) the computer is booted responsive to the boot record of the bootable media of the default storage device drive (see par. 27, Cromer teaches that if a device does not supply correct password, it will select next boot device according to priority, Figure 2A/blocks 130, 122).

30. **Regarding to claim 4**, Cromer teaches that the method according to claim 1, and further comprising: c) executing at least one terminal control software component in the computer which is stored on the bootable media of the default storage device drive; and d) dispensing cash from a cash dispenser responsive to at least one terminal control software component (see Cromer, Figure 2A and description). Examiner notices

that this is a well known and standard feature for an ATM. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the password protecting boot device invention as taught by Cromer with an ATM to offer a more secure ATM system that can dispense money.

31. **Regarding to claims 5-6**, Cromer teaches that the method according to claim 1, and further comprising:

c) receiving a first input that is representative of a request to run a BIOS setup program (see Cromer, Figure 2A/blocks 106, 126 and description); and

d) requiring a user to provide a second input that corresponds to the BIOS boot password stored in the BIOS prior to running the BIOS setup program (see Cromer, Figure 2A/blocks 106, 126 and description).

32. **Regarding to claim 7**, Cromer teaches the method according to claim 6, wherein steps (b) and (c) both the BIOS boot password and the BIOS program password are stored in the BIOS of the computer (see Cromer, par. 6).

33. **Regarding to claim 8**, Cromer teaches the method according to claim 1, wherein in step (b) the default storage device drive and associated bootable media correspond to a hard drive (see Cromer, par. 7).

34. **Regarding to claims 9-13**, Cromer teaches wherein in step (b) the bootable media of the at least one alternative storage device drive corresponds to a portable media; wherein the portable media is a floppy disk, CD, DVD, and a portable hard drive (see Cromer, par. 7).

35. **Regarding to claims 16 and 19**, these claims correspond to claims 1-13 and have the same elements and limitations. Hence, they are rejected under the same rationale provided in claims 1-13 (see entire Cromer document).

36. **Regarding claims 14-15, 17-18, and 20-21**, these claims include the necessary computer readable programs for implementing the method claims 1-13 and have the same elements and limitations. Hence, they are rejected under the same rationale provided in claims 1-13.

37. **Regarding claims 22-34**, these claims include the necessary ATM features and have the same elements and limitations as the method claims 1-13. Hence, they are rejected under the same rationale provided in claims 1-13.

### ***Conclusion***

38. Claims 1-34 are rejected.

39. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

40. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

41. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAI TRAN whose telephone number is (571)272-7364. The examiner can normally be reached on M-F, 9-4 PM.

42. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James P. Trammell can be reached on (571) 272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

43. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. T./

Examiner, Art Unit 3694

/James P Trammell/

Supervisory Patent Examiner, Art Unit 3694